

Students in the Late Sixteenth and Seventeenth Century

[A PAPER READ AT THE GENERAL MEETING OF THE I.A.A.M.
BY DR. A. E. SHIPLEY, F.R.S., HON. SC.D. PRINCETON,
MASTER OF CHRIST'S COLLEGE, CAMBRIDGE]

PART I

A great change came over education in the early Tudor times, or at least a great change was being advocated by the leaders of thought in education. The practice which had prevailed of bringing up well-born youths in the households and camps of princes and noblemen was falling into desuetude, and in England came practically to an end with the termination of the War of the Roses. The well-born were now beginning to have tutors at home, and governors when they went abroad. The Tudor nobility was further beginning to be recruited largely from men successful in many worldly matters, business, travel, commerce, exploration, seamanship. Such a nobility may have lost in blood, but, in personal distinction, it gained immensely.

One problem which was keenly discussed during the sixteenth century was that of the superiority of a country to a court life, and whenever, as was often the case, the country life was selected it tended to develop a combination of English scholarship with rural economy which greatly increased the common stock of knowledge of the natural sciences and of agriculture. But many other forces were at work. The Statutes of my own College, refounded by Lady Margaret in 1505, marked an epoch. These statutes, which for 350 years remained unchanged, bear the date 1506 and indicate the beginning of what was then called "the new learning".

They were drawn up by the Queen Mother's Confessor, Bishop Fisher, and were probably influenced by Erasmus. The *disciplina mathematica* conspicuous in the statutes of Queens' and Jesus does not occur in the statutes at Christ's; but for the first time we find provision for the study of the works of the poets and orators of antiquity, and for the first time there is a mention of pensioners. Colleges founded before Christ's were in the main restricted to the older and medieval scholastic discipline, but at Christ's, though most of the earlier studies were retained, there was evidence of a more liberal attitude to study, and at an earlier date provision was made for the study of Greek, a language which was then as warmly rejected at Oxford as to-day it is passionately retained. Hebrew also took an early place in the curriculum, and under the influence of Erasmus what we now call the "higher criticism" was not discouraged.

A little later than this time, in 1523, a very remarkable Spaniard, one Juan Luis Vives, who had early settled in England, attracted by the Court of Henry VIII, published his *De Trahendis Disciplinis*. In it he—if not the first, amongst the first—laid stress upon the study of the vernacular. "For boys do not understand even sufficiently well their mother tongue, unless everything, bit by bit, is explained to them in the most careful manner. Let the teacher, further, keep in his memory the ancient forms of his mother tongue, and not only the knowledge of recent words, but also of the old words and those which now have passed out of common use, for unless this happens . . . books written a hundred years previously would not be understood by posterity".

But few other writers adopted this desire, and not until sixty years later when Mulcaster published his "Elementarie" (but a decade before Shakespeare and Spencer began to write), did the subject command the attention it deserved. His was the first text-book on the teaching of English. I cannot refrain from quoting a few lines from his peroration: "Our own language bears the joyful title of liberty and freedom, the Latin remembers us of our thralldom and bondage. I love Rome, but London better. I favour Italy, but England more. I honour the Latin, but I worship the English."

. . . Why not (write) all in English, a tongue of itself both deep in conceit and frank in delivery? . . . I do not think that any language, be it whatsoever, is better able to utter all arguments either with more pith or greater plainness than our English tongue”.

But to return to the book of Vives; he urges the study of Geography, not only in Strabo and Ptolemy, but would add “the recent discoveries in the East and West of our people”. The discovery of the art of engraving on copper about 1460 was first applied to the printing of maps in the Geography of Ptolemy (Rome 1478), and like the invention of printing was an immense aid in the diffusion of knowledge.

Vives led in the battle, only just beginning, between the supporters of the written word and those who “sought for Truth in Truth’s own Book”. He tells us that “although the writings of the old Greeks and Romans are the opinions of learned men, yet not even all these opinions and judgments are to be accepted”. He pleads for direct, for first-hand observation of Nature. He devotes many paragraphs to his method of teaching boys natural-history: “At first should be shown that which is most easily perceivable by the senses. For the Senses are the sources of all cognition”. “We look for the pupil to be keen in his observation and sedulous and diligent in it, but he must not be pertinacious, arrogant, contentious. There is no need of altercations and quarrels, all that is wanted is a certain power of observation. So will he observe the nature of things in the heavens, in clouds and in sunshine, in the plains, on the mountains, in the woods. Hence he will seek out and get to know many things from those who inhabit those spots. Let him have recourse, for instance, to gardeners, husbandmen, shepherds and hunters, for this is what Pliny and other great authors undoubtedly did, for any one man cannot possibly make all observations without help in such a multitude and variety of directions” . . . “Therefore whilst attention is given to observation of nature no other recreation need be sought. It is a sauce to the appetite. It is in itself a walking exercise and a study at one’s ease. It is at once school and schoolmaster”.

New Res 18 May 1919 - B. Lane

I know no better description of what we erroneously think is a modern method, "nature-study": a term Vives himself used, and, as far as I know, used for the first time.

Vives and Erasmus and many lesser lights were struggling against the obsession of the medieval teachers for the written word. They and their followers were heading a rebellion against "the domination of *à priori* abstract conceptions, into which science was to be fitted without recourse to nature". Vives wrote "Who would tolerate the painter who occupied all his life in preparing his brushes and his colours?", and again "Logic is a most respectable art, but what are we to think of this cursed *babel* which has corrupted every branch of knowledge?"

Like many reformers Vives lived before his time, and since in those days the world moved more slowly, he did not come into his own until a correspondingly later date. I have only touched on one or two of the subjects this gifted Spaniard adorned, and I have had to leave on one side many another able writer of the time of King Henry VIII. I have chosen Vives as an example too little known, of a most original innovator in the field of education in the earlier Tudor times, and because he shows, I think, better than any other I have come across, that the problems of education are eternal. The Tudor teacher and the Tudor boy had to face the same problems as the twentieth century teacher and the twentieth century boy.

Let us now turn to the state of learning and to the teaching of the later Tudor and of the Stuart times.

PART II

With one or two exceptions—astronomy on the physical side, human anatomy on the biological—the reawakening in science lagged a century or more behind the renaissance in literature and in art. What the leaders of thought and of practice in the arts of writing, of painting and of sculpture in western Europe were effecting in the latter part of the fifteenth and throughout the sixteenth century, began to be paralleled in the investigations of the physical laws of nature only at the end of the sixteenth century and throughout the

first three quarters of the seventeenth. It was in the Stuart reigns that, in England at any rate, the specialist began to emerge from those who hitherto had "taken all knowledge to be their province".

Anatomy on the biological side, and astronomy on the physical, were the natural sciences which earliest broke loose from the scholastic domination which ever placed authority above experiment.

The great outburst of scientific enquiry which occurred during the seventeenth century was partly the result, and partly the cause, of the invention of numerous new methods and innumerable new instruments, by the use of which advance in natural knowledge was immensely facilitated. Early in the century (1614), Napier of Merchiston had made known his discovery of logarithms, and logarithmic tables were first published in 1617. Seven years later, the slide rule, which to-day plays a large part in physical and engineering science, was invented by Edmund Gunter. Decimals were coming into use and, at the close of the sixteenth century, algebra was being written in the notation we still employ. William Gilbert, physician to queen Elizabeth, published his experiments on electricity and magnetism in the last year of the sixteenth century. Galileo was using his newly constructed telescope; and, for the first time, Jupiter's satellites, the mountains in the moon and Saturn's rings were seen by human eye. The barometer, the thermometer and the air pump, and, later, the compound microscope, all came into being at the earlier part of our period, and by the middle of the century were in the hands of whoever cared to use them.

Francis Bacon bridged the gap between medieval science and the science of the Stuarts. The inductive method was no innovation, Bacon was a reformer of the scientific method. He proclaimed that the careful and systematic investigation of natural phenomena and their accurate record would give to man a power in this world which, in his time, was hardly to be conceived.

Though Bacon did not make any one single advance in natural knowledge—though his precepts, as Whewell reminds us, "are now practically useless"—yet he used his great

talents, his high position, to enforce upon the world a new method of wrenching from nature her secrets and, with tireless patience and untiring passion, impressed upon his contemporaries the conviction that there was "a new unexplored Kingdom of Knowledge within the reach and grasp of man, if he will be humble enough, and patient enough, and truthful enough to occupy it".

Though Milton, as a poet, stood outside the stream of tendency of the times in which he lived, yet in his poems we see effects of the rising tide of science on literature. Milton, one must never forget—and indeed, it is not easy to do so—was, for some years, a schoolmaster. He took a view of his profession which even now would be thought liberal; he advocated the teaching of medicine, agriculture and fortification, and, when studying the last of these, remarked that it would be "seasonable to learn the use of the Globes and all the maps". Like Lord Herbert of Chierbury, he held that the student should acquire some knowledge of medicine, he should know "the tempers, the humours, the seasons and how to manage a crudity". Himself a sufferer from gout, he learnt, at any rate, the lesson of moderation. Mathematics, in his curriculum, led to the "instrumental science of Trigonometry, and from thence to fortification, architecture, enginry or navigation".

In the autobiography of Lord Herbert of Chierbury we are given an interesting account of the education of a highly-born youth at the end of the sixteenth and the beginning of the seventeenth century. Lord Herbert seems to have had a fair knowledge of Latin and Greek and of logic when, in his thirteenth year, he went up to University College, Oxford. Later, he "did attain the knowledge of the French, Italian and Spanish languages," and, also, learnt to sing his part at first sight in music and to play on the lute. He approved of "so much logic as to enable men to distinguish between truth and falsehood and help them to discover fallacies, sophisms and that which the schoolmen call vicious arguments"; and this, he considered, should be followed by "some good sum of philosophy". He held it also requisite to study geography, and this in no narrow sense, laying stress upon the methods

of government, religions and manners of the several states, as well as on their relationships *inter se* and their policies. Though he advocated an acquaintance with "the use of the celestial globes", he did "not conceive yet the knowledge of judicial astronomy so necessary, but only for general predictions; particular events being neither intended by nor collected out of the stars". Arithmetic and geometry he thought fit to learn, as being most useful for keeping accounts and enabling a gentleman to understand fortifications.

John Evelyn, another example of a well-to-do and widely cultivated man of the world, was acquainted with several foreign languages, including Spanish and German, and took an interest in hieroglyphics. He studied medicine in 1645 at Padua, and there acquired those "rare tables of veins and nerves" which he afterwards gave to the Royal Society, attended Le Felure's course of chemistry at Paris in 1647, was skilled in more than one musical instrument, learned dancing and, above all, devoted himself to horticulture.

His well known *Sylva*, published in 1664, had an immediate and a widespread effect, and was, for many years, the standard book on the subject of the culture of trees. It is held to be responsible for a great outbreak of tree-planting. The introduction to Nisbet's edition gives figures which demonstrate the shortage in the available supply of oak timber during the seventeenth century. The charm of Evelyn's style and the practical nature of his book, which ran into four editions before the author's death, arrested this decline ("be aye sticking in a tree; it will be growing, Jock, when ye're sleeping", as the laird of Dumbiedykes counselled his son), and to the *Sylva* of John Evelyn is largely due the fact that the oaken timber used for the British ships which fought the French in the eighteenth century sufficed, but barely sufficed, for the national needs.

Pepys attended regularly the early meetings of the Royal Society at Gresham College, and showed the liveliest interest in various investigations on the transfusion of blood, respiration under reduced air pressure and many other ingenious experiments and observations by Sir George Ent and others. On January 20, 1665, he took home *Micrographia*, Hooke's

book on microscopy—"a most excellent piece, of which I am very proud".

Although Pepys had no scientific training—he only began to learn the multiplication table when he was in his thirtieth year, but, later, took the keenest pleasure in teaching it to Mrs. Pepys—he, nevertheless, attained to the presidentship of the Royal Society. He had always delighted in the company of "the virtuosos" and, in 1662, three years after he began to study arithmetic, he was admitted a fellow of their—the Royal—Society. In 1681, he was elected president. This post he owed, not to any genius for science, or to any great invention or generalisation, but to his very exceptional powers as an organiser and as a man of business, to his integrity and to the abiding interest he ever showed in the cause of the advancement of knowledge.

In Stuart times an investigator was not hampered by the modern introduction of technical words into the sciences. He could explain in simple language to his friends what he was doing, and the advance of natural science was keenly followed by all sorts and conditions of men. King Charles II took a curious interest in anatomy; on May 11, 1663, Pierce, the surgeon, tells Pepys "that the other day Dr. Clerke and he did dissect two bodies, a man and a woman, before the King with which the King was highly pleased". Pepys also records, February 17, 1662/3, on the authority of Edward Pickering, another story of a dissection in the royal closet by the king's own hands.

Another royal personage, Prince Rupert, "full of spirit and action, full of observation and judgment," about this time invented his "chemical glasses which break all to dust by breaking off a little small end: which is a great mystery to me". He had, says Gramont, *quelques talens* for chemistry and invented a new method for making gunpowder, for making "hails hot" and for boring cannon. His traditional invention of the almost lost art of mezzotint is probably due to the fact that, at an early date, the real inventor, Ludwig von Siegen, explained to him his process, and that Prince Rupert demonstrated with his own hands this new method of engraving to Evelyn.

The supreme genius of Newton has ensured him a place in the very small list of the world's thinkers of the first order. He, too, exercised a certain influence in affairs, and, during his later years, he took a keen interest in theological speculations; but his activities in these fields are completely overshadowed by the far-reaching importance of his great discoveries as a natural philosopher and a mathematician. As the discoverer of the decomposition of white light in the spectrum, he may be regarded as the founder of the modern science of optics. His discovery of the law of gravitation, and his application of it to the explanation of Kepler's laws of planetary motion and of the principal inequalities in the orbital motion of the moon, made him the founder of the science of gravitational astronomy. His discovery of the method of fluxions entitles him to rank with Leibnitz as one of the founders of mathematical analysis. His chief work, *Principia*, has been described by Dean Peacock as "the greatest single triumph of the human mind".

The second man of outstanding genius in British science in the seventeenth century was Harvey, who, like Newton, worked in one of the two sciences which, in Stuart times, were, to some extent, ahead of all the others. Harvey, "the little choleric man", as Aubrey calls him, was educated at Cambridge and at Padua, and was in his thirty-eighth year when, in his lectures on anatomy, he expounded his new doctrine of the circulation of the blood to the College of Physicians, although his *Exercitatio* on this subject did not appear till 1628. His notes for the lectures are now in the British Museum.

Great as were the seventeenth century philosophers in the biological and medical sciences, they were paralleled, if not surpassed, by workers on the physical and mathematical side. Robert Boyle was, even as a boy of eighteen, one of the leaders in the comparatively new pursuit of experimental science. His first love was chemistry, "Vulcan has so transported and bewitched me as to make me fancy my laboratory a kind of Elysium," thus he wrote in 1649. A few years later (1652-3), in Ireland, where he was called to look after the family estates, he found it "hard to have any Hermetic thoughts," and

occupied his mind with anatomy and confirming Harvey's discovery of the circulation of the blood. A year later, he settled at Oxford, where he arranged a laboratory and had as assistant Robert Hooke. Meetings were held alternately at Boyle's lodgings and at John Wilkin's lodge at Wadham, and were frequented by Seth Ward and Christopher Wren and by many others.

Stimulated by Otto von Guericke's contrivance for exhausting air from a vessel, Boyle, aided by Hooke, invented what was called the "machina Boyleana", which comprised the essentials of the air-pump of to-day. At this time, Boyle busied himself with the weight, with the pressure and with the elasticity of air—the part it played in respiration and in acoustics. In spite of the fact that he was the first to distinguish a mixture from a compound, to define an element, to prepare hydrogen, though he did not recognise its nature, he had in him the touch of an amateur, but an amateur of genius.

It was men such as these that re-established the Royal Society in 1660. Exactly a century earlier, the first scientific society, the *Academia Secretorum Naturae* of Naples had its origin. This was followed by several others, most of them but shortlived, in Italy and in France. Among English or Teutonic folk, the Royal Society was the earliest to appear, and, even if we include the scientific societies of the world, it has had the most continuous existence. Indeed, before its birth, it underwent a long period of incubation, and its inception was in reality in 1645. At that date, a society known as the Philosophical, or, as Boyle called it, the "Invisible", College came into being, which met from time to time at Gresham College and elsewhere in London. During the civil war, this society was split in two, some members meeting in London, some at Oxford, but the meetings, wherever held, were at irregular intervals. On the restoration, the meetings were resumed in London and, in 1662, the society received the royal charter.

PART III

I come to the last part of my address, and I venture to think the most important. I mean now to refer to the status and above all to the emoluments of the assistant masters at secondary schools.

I am still so far an old-fashioned Zoologist as to believe in the immense part environment plays in the later life of an organism, especially if that organism be a boy or girl. As President of our College Boys' Home in Camberwell, where we turn little gutter-snipes into little gentlemen, I should be wilfully shutting my eyes if I did not see the moulding and enduring influence of environment. But, apart from what I myself have seen, I notice that those philosophers who are ready to stake their pile on heredity as the paramount if not the only factor in the future of their offspring never stake their children. They are as anxious as any other parent that their boys and girls should have the best of nurses, the best of companions, and the best of school-masters.

As Arthur Benson has recently reminded us, next to our birth and to our death, education is by far the most important feature in our life. To these three important events, I should myself—but I speak as an amateur—have added *marriage*, but in this matter my friend Mr. Benson is as inexperienced as I am. But whether he is right or I am right, we teachers are placed on the same level as the Divine, the Physician and, dare I add, the Undertaker? There is, however, this difference. Whereas the administrations of the former are intermittent and comparatively temporary, a school-master's care is continuous and lasts for years.

Education is the one hope of the future. Without education is it conceivable that the dreams of those who, like the Dean of St. Paul's, preach the Gospel of Genetics, can ever be realised. Education is of more importance than politics, for it ought, though I fear it does not always do so, to educate the politician.

As a profession then Education ought to somehow make a career for our best men. Does it?

There are a few prizes, too big perhaps and certainly far too few. There are also many attractions which induce the recently graduated to take to schoolmastering. The love of his old school; his taste for a life with lots of exercise and good holidays; and, what is often far more urgent, his desire to earn enough to keep himself, to relieve his father of further liability and to start out into the world. Almost the only career open to the young B.A. without further training, but with immediate prospects, is the scholastic, and can we wonder that many of our graduates adopt it? For the first six or eight years the life, if not well paid, is not markedly underpaid and is pleasant enough, but then comes the time when a man begins to wonder about his future, his prospects. He has seldom enough to marry on, and yet the men I have in my eye ought to marry. Can you wonder that when young men, of little or no fortune, ask my advice about becoming schoolmasters, I feel it my duty to place these facts before them?

“The cheapest thing going to-day”, says the Satirist, “is education.” “I pay my cook”, said Crates ironically, “four pounds a year; but a philosopher can be hired for about sixpence and a tutor for three-half-pence.” “So to-day”, writes Erasmus, “a man stands aghast at the thought of paying for his boy’s education a sum which would buy a foal or hire a farm servant”. “Frugality—it is another name for madness!” After 400 years the madness of Erasmus has not abated.

The position has not even changed since Plato wrote 2,000 years ago. If we were being ruled by statesmen instead of being enslaved by politicians, we might hope that a little of our money which is being so lavishly disposed of by other hands might be spent on improving the position of those in whose hands lie the future of our race. The man in the streets, or as they say in America the man on the cars, does not realise that by submitting himself or his son to education he is putting himself under one of the strongest forces in the world. He is apt to think that he is submitting himself or his son to something which is irksome, something which is “a bit of a bore”, but hardly to be avoided, like having one’s

hair cut, trying on clothes or being photographed. He therefore seeks to cheapen education, and, in so far as he succeeds, the educators deteriorate in number and in power.

In 1910, out of 2,025 teachers in England, 153 received an initial salary of less than £100 a year; 1,630 less than £150; and only 241 over £150. In the same year the maximum salary of 1,903 teachers in secondary schools were divided as follows:—822 received less than £200 a year; 850 less than £350 a year; and but 231 over £350 a year.

I will not enter into a comparison with the somewhat higher salaries and far less onerous duties which the schoolmasters of other leading countries enjoy. But I do wish to ask the question "What have our schoolmasters to look forward to?" Hardly a pension. I know of schools with enlightened governors who are doing their best to establish pension funds, but the statement in your Report that 'Pensions for masters in Secondary Schools are practically non-existent in England' is in the main true. Half the little that is being done comes out of the pocket of the underpaid assistant master. Surely the Government might here contribute an equal number of stamps.

If the right kind of men is to be secured for the teaching profession, it seems clear that a national system of pensions must be established. The question then must at once be asked "Who are to benefit by such a system?" It is evident that a register must be kept of those persons teaching in secondary schools, who possess suitable qualifications of training and experience. A similar list should be kept for teachers in technical institutions. By the Elementary School Teachers Act of 1898, a pension system was established for certified elementary teachers, who are all registered at the Board of Education. By the new Scottish Superannuation Scheme, now before Parliament, the elementary and secondary teachers in Scotland, whose service is recorded in the books of the Scottish Education Department, are to be provided with reasonably adequate pensions. If secondary and technical education in England and Wales is to be organised and made efficient, it is evident that adequate superannuation provision must be made for secondary and

technical teachers. The statistics of salaries in secondary schools on the Grant List, just published by the Board of Education, prove beyond question the immediate necessity for such provision. In these schools, 4,002 men have an average salary of £168, and they have practically no provision for old age.

To concentrate and express the opinion of teachers upon such matters as registration, superannuation, and the general organisation of the profession, some body fully "representative of the profession" is imperatively needed. Such a body, we may hope, will shortly be established in the form of the Teachers' Council suggested in the Report made by Sir Robert Morant to the President of the Board of Education on the question of Registration.

The establishment of a Teachers' Council for England and Wales is the first step towards organizing the profession of schoolmastering. The Universities would, I suppose, have some representatives on such a Council, and though, of course, I cannot speak definitely, I think I can speak confidently, not only for my own University, not only for the older Universities, but for those younger Universities whose establishment and growth we all welcome, when I say that to such a Teachers' Council the Universities would send of their very best.

The low salaries and the absence of pensions leads to a great wastage, and the statistics of the number of teachers who leave the profession after a few years' experience of it form sad reading. One of my pupils who only started schoolmastering last October said to me the other day "I like the work, and I like the boys, and I like the masters, but I am dreadfully depressed by the senior masters; they're all very kind and very decent, but each of them has said sometime or other this term, 'Get out of this if you possibly can, before you're too old.'"

When I came up to Cambridge, I fancy my class-mates—if I may use another Americanism—commanded higher salaries than men of the same status and degree do now, in spite of the fact that the cost of living has greatly increased. From say 1875–1895 teaching, at any rate in public schools, was looked upon as a good career. With the exception of

some few schools with large endowments this is now hardly the case. It was my knowledge of the way schoolmasters were underpaid that lead me some ten years ago to take an active part with Mr. W. N. Shaw in establishing the Appointments Board at Cambridge, an institution which has been copied by many Universities. Thus I am partly responsible for, but by no means repentant of shunting a number of potential teachers on to administrative and commercial lines, where they could earn at least enough to marry on and bring up a family.

The question then arises, What can be done? And here I feel in my ignorance that I can offer little help. It is no use—at least in this matter I hope it is of no use—to take the high minded attitude that a teacher should be indifferent to money and willing out of his love of teaching to teach from charity. A few can afford to do so, but I appeal to them to stand in with those who to do their work efficiently must have a living wage. Education is not charity, and should not depend on taxing those who can so ill afford it as the teachers in secondary schools. There are, as we all know, unworldly, devoted men who freely give their knowledge and their time for nothing, and in some countries the Government save the public purse by handing over teaching to various religious bodies. Great Britain will hardly recur to this somewhat medieval custom, nor do I think we want it to. What we do want is a career for able men, a good life's work, which should carry with it the probability of marriage, the possibility of provision for a family, reasonable facilities for recreation, some security of tenure, a little leisure—a vanishing factor in modern life—but I do plead for a little leisure for the teacher if only he may think, and lastly but not least, some opportunity for a vigorous and enthusiastic master to have some "say" in the government and management of the school he serves.

Some such position as that I have so inadequately sketched is what the assistant masters should aim at. How can they attain? It is no use saying in the classical language of Mr. Dombey's butler, "Wait and see". Wishing that other people would be equally high-minded with ourselves, advances us no whither. There must be organization, and the first step



3 0112 105645268

in that organization should I think be the establishment of the above mentioned Teachers' Council for England and Wales, and the compulsory registration of all assistant masters in secondary schools.

I understand that such a Register once existed and that it was speedily destroyed. I do not know why. Perhaps there were no votes in it, or there may have been too many votes in it. But whatever was the reason of its disappearance, its re-establishment would be a great step in the organization of our teachers in secondary schools.

In your Association you have the machinery for agitating and for making public the conditions under which you live. The members of the Register would supply the motive power. But in order that the motive power be not dissipated in heat and friction, I think the machinery should only be expected to do one thing at a time, and that a big, solid, generally useful and easily appreciated piece of work. As a suggestion, but only as a suggestion, could not the machinery in the first instance deal firmly, but gently, with the governing bodies of secondary schools, and compel them to insure the lives of their teachers, the State and the schools between them contributing say two-thirds of the premiums, and in such a way, by means of some clearing house, that such insurance could in no way be used to prevent a man from seeking a better post elsewhere?

In North America, educated opinion holds that the wisest and most beneficent application of the vast sums Mr. Carnegie has given away is the pension fund he has established for teachers in Universities, Colleges and Technical Schools. For this purpose he has set aside £3,000,000, bringing in an income of £150,000 a year; and he extended the benefits of this fund not only to teachers in the United States, but to those of Canada and Newfoundland.

Would that some such fund could be established in our Empire. Something to look forward to, some chance of rest before the final rest, would put heart into many an over-worked and over-worried teacher. For after years of teaching we weary, as Cowper has it:—

“Of dropping buckets into empty wells
And growing old in drawing nothing up”.